Thompson/Center

FIRE STORM™

Suggested Loads, Assembly, Disassembly & Cleaning Instructions For The Cap Lock or Flint Lock Fire Storm Only!

Read and Understand the booklet entitled, "Shooting Thompson/Center Black Powder Muzzleloading Firearms," Before Using This Rifle

Thompson/Center Arms Co., Inc.
P.O. Box 5002
Rochester New Hampshire 03866

FIRE STORM™

The following sections contain information that is specific to the Thompson/Center Fire Storm muzzleloading rifle.
It covers both the flint lock and cap lock 209 versions.

It must be read and understood before using this rifle.

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IMPORTANT NOTE:
Separate Owner's Manuals for any other models of muzzleloaders which Thompson/Center offers are available free from the factory upon request. Call or write with your specific needs.

This pamphlet contains information that is essential to the assembly, disassembly, and cleaning of the Fire Storm Rifle. You must also read and understand the information contained in the booklet "Shooting Thompson/Center Black Powder Firearms" that came with your rifle. You must read this material in its entirety and fully understand it's significance before you can safely use this rifle.

This pamphlet also contains specific loading information for the Fire Storm only.

If a Thompson/Center muzzleloading firearm is loaned or sold (by an individual or a dealer), the booklet "Shooting Thompson/Center Muzzleloading Black Powder Firearms" must accompany the firearm. Replacement booklets are available at no charge from our factory.

If, after reading the literature that accompanied your muzzleloading firearm, you still have questions concerning the safe use of your Thompson/Center firearm, write or call our Customer Service Department at:

Thompson/Center Arms Company, Inc.
P O Box 5002
Rochester, NH 03866
Telephone: 1-603-332-2333

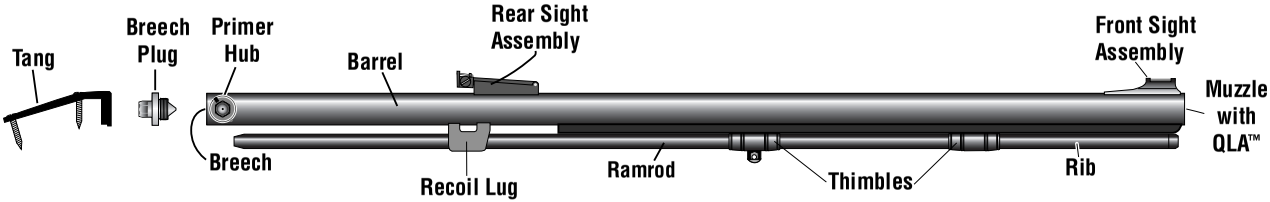
And remember The National Rifle Association's
Fundamental Rules for Safe Gun Handling are:

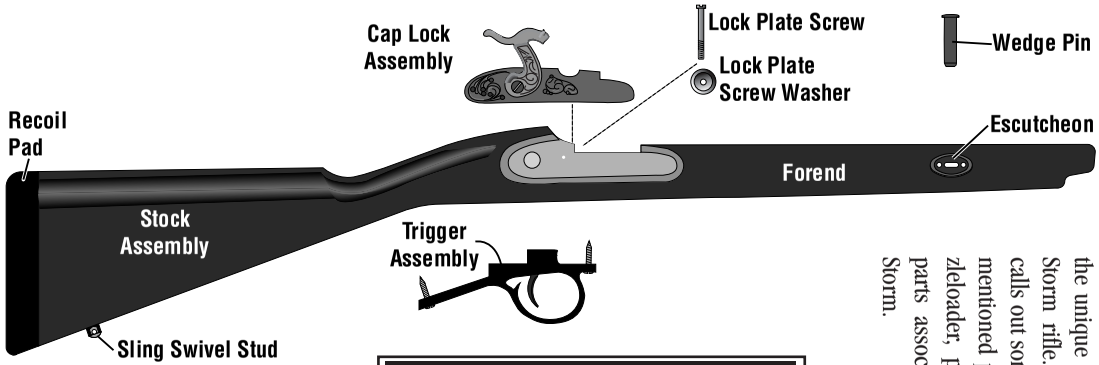
1- Always keep the gun pointed in a safe direction.
2 - Always keep your finger off the trigger until ready to shoot.
3 - Always keep the gun unloaded until ready to use.

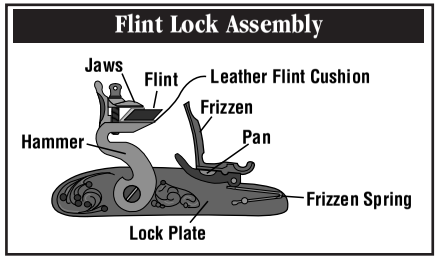
WARNING

Discharging firearms in poorly ventilated areas, cleaning firearms or handling ammunition may result in exposure to lead and other substances known to cause birth defects, reproductive harm and other serious physical injury. Have adequate ventilation at all times. Wash hands thoroughly after exposure.

Nomenclature for the Fire Storm™ Muzzleloading Rifle.







Know your Fire Storm rifle before attempting to use it. This pamphlet will help you to become familiar with the unique characteristics of the Fire Storm rifle. The diagram to the left calls out some of the more commonly mentioned parts of a Cap Lock muzzleloader, plus some of the unique parts associated only with the Fire Storm.

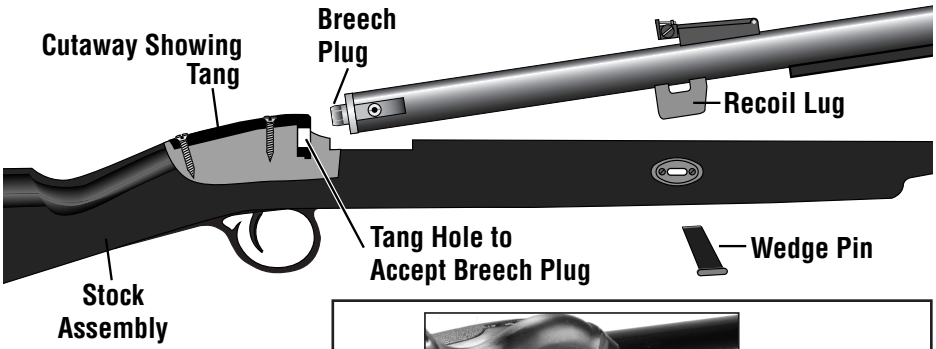
Assembly of your Thompson/Center Fire Storm™ Muzzleloading Rifle

If you purchased your Thompson/Center Fire Storm rifle still packaged it was disassembled. Assembly is relatively easy when you follow these steps:

1. Remove the ramrod from the thimbles under the barrel.

2. Grasp the barrel, and insert the hex head of the breech plug into the tang hole in the stock, making sure that the breech plug fits flush against the tang.

IMPORTANT: When assembling or disassembling, keep the barrel at a minimum angle to the stock; just enough for the lug to clear the lug slot in the stock. An angle sharper than this will bind and possibly bend the tang.



209 Primer Ignition

The Fire Storm cap lock features 209 shotshell primer ignition.

3. Tip the barrel down into the barrel channel in the stock. The recoil lug should fit neatly into the recoil lug receptacle slot in the stock.

4. Squeeze the barrel and forearm of the stock together with your hand, and insert the wedge pin through the escutcheon hole in the forend and the hole in the recoil lug. The pin will fit snugly, and may have to be tapped slightly for full engagement.

Note: If, when bringing the forend and barrel together there is heavy resistance, stop and check to see that the hex end of the breech plug and the retaining ring are fully seated in the breech plug slot in the tang.

5. Once the barrel has been seated in the stock and the wedge pin is in place, reinsert the ramrod into the thimbles under the barrel.

Disassembly of the Thompson/Center Fire Storm™ Muzzleloading Rifle

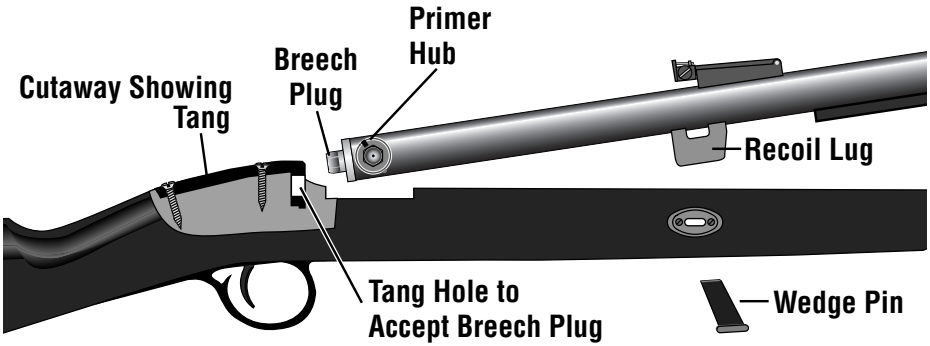
To disassemble the Fire Storm flint lock rifle, reverse the assembly procedure as outlined.

1. Pull out the wedge pin. It may be necessary to tap it partially out from the other side in order to grasp the pin and pull it the rest of the way out.

2. Lift the barrel up and away from the barrel channel in the stock; just far enough so that the barrel lug clears the lug slot in the stock.

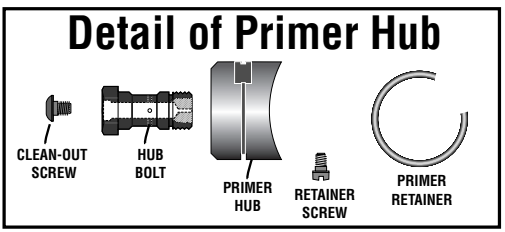
3. When the barrel lug clears the lug slot in the stock, pull the barrel forward, thus pulling the breech plug out of the breech plug hole in the tang.

4. Further disassembly of the Fire Storm includes removal of the breech plug from the barrel. Using the breech plug wrench, or a standard 7/16" hex wrench, turn the breech plug counter clockwise. There may be some initial resistance to over come, so make sure you have firmly anchored the barrel onto a surface where you can acquire some needed leverage.



5. For those with the cap lock (209 version), further disassembly includes removal of the primer hub.

6. (For Fire Storm 209 Model Only) Using the breech plug wrench supplied with the rifle, turn the hex head hub bolt counter-clockwise. This will enable you to remove the "HUB" from the rifle.



7. (For Fire Storm 209 Model Only) Using a 1/8" allen wrench, remove the hub bolt clean-out screw located at the end of the hex head hub bolt. This will give you access to the inside of the hub and the hub bolt. When cleaning, clean the inside of the hub as well as the vent hole and threads of the hub bolt ((T/Cs breech plug brush works well to clean the bolt hole in the hub, use a nipple pick and a nylon or bronze brush to clean the other parts). Lube the threads with

an anti-seize lubricant like Gorilla Grease before re-installing the hub to the rifle.

8. The 209 retaining spring is located on the hub. It is secured by a locking screw. To adjust this spring for tension, back out the retaining screw, and turn the spring closer to the fire channel hole to increase the tension holding the 209 primer in. Turn the spring further away from the fire channel hole to decrease the tension on the primer.

Cleaning the Thompson/Center Fire Storm™

→⚠WARNING←

Never attempt to clean a charged muzzleloading firearm. AN ACCIDENTAL DISCHARGE CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

The Fire Storm is unlike most traditional side lock rifles in that it has a removable breech plug.

While field cleaning is done in the same way that a traditional side lock is cleaned, i.e. running a few patches up and down the bore, one saturated with Thompson/Center's No.13 Cleaning Solvent, followed by a dry patch; total or complete cleaning is different from a traditional flint lock in that it can be done from the **breech** end, as well as from the muzzle.

1. Disassemble the Fire Storm in accordance with the instructions cited in the disassembly section of this pamphlet.

2. Once the barrel has been removed, using the breech plug wrench, or a 7/16" open or box wrench, unscrew the breech plug by turning it counter clockwise. It may be necessary to over come the initial resistance caused by the barrel to the breech plug seal, especially if you have done some extensive shooting. The breech plug should now be scrubbed free of fouling, and later it should be lubricated with an anti-seize lubricant like T/C's Gorilla Grease before re-installation. The threads in the breech end of the barrel must also be well cleaned with a stiff bristle brush.

3. Remove the touch hole bushing by unscrewing it. Clean the inside and the threads. Lubricate the threads with an anti-seize lubricant before re-installing.

4. Fill a pan or pail with very hot soapy water, and submerge either end of the barrel (breech or muzzle) into the hot soapy water. Using a jag, run a cleaning patch up and down the bore of the barrel to flush out the fouling. When the fouling has been removed, remove the barrel and run a few dry patches through it. Wipe off the excess water, and follow with a patch coated with a quality lubricant like Thompson/Center's Natural Lube 1000 Plus Bore Butter; an all-natural lubricant, rust inhibitor and preservative.

5. Re-install the breech plug, making sure you have cleaned the threads and applied an anti-seize lubricant to the threads. Using your wrench, turn clockwise until "snug".

6. (For Fire Storm 209 Model Only) Remove the Primer Hub from the rifle and clean the inside of the hub and the hub bolt thoroughly.

7. You are now ready to reassemble the Fire Storm in accordance with the assembly instructions as found on page 6 of this this supplemental pamphlet.

8. Test the functioning of the hammer mechanism to make sure the mechanism is working properly. Wipe down the outside components as well. Make sure (with the flint lock model) that you thoroughly clean and dry the pan and frizzen. Do Not lubricate either the pan or the frizzen.

Pulling a Charge from T/C's Fire Storm™

⚠WARNING

Never attempt to pull a charge from your Fire Storm until you are absolutely certain that the firearm is deprimed (priming powder is absent from the pan or the 209 Primer is not in the hub). Do not attempt to pull a charge from any gun until the powder charge has been rendered inert (barrel removed and its breech section submerged in hot water for at least one half hour). AN ACCIDENTAL DISCHARGE CAN CAUSE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Pulling the Charge

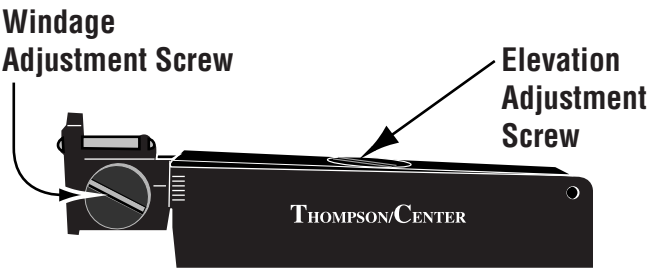
Under normal conditions, a side lock is unloaded by simply firing it into a suitable and safe back stop. There are conditions which will not allow you to do this. See section in "Shooting Black Powder Muzzleloading Firearms" pertaining to "Pulling a Charge".

Because the Fire Storm has a removable breech plug, once the breech end of the barrel has been soaked in hot water for at least 1/2 hour, the procedure of removing the charge is different from a standard "fixed" breech side lock. Once the powder has been rendered inert by soaking, you should remove the breech plug. (See instructions for disassembly in this pamphlet). After the breech plug has been removed, the charge and stuck projectile can be driven out of the breech end by inserting your ramrod in the muzzle end and applying pressure. Once the charge and projectile have been removed, clean the barrel (and breech plug) in accordance with the instructions in this pamphlet. If

for any reason you are unable to remove the charge, make sure the charge has been rendered inert, squirt oil into the breech area, and return the barrel to the service dept with a letter describing the problem. **Thompson/Center Arms, Inc., Farmington Road, Rochester, NH 03867.**

Iron Sight Adjustment For The T/C Fire Storm™ Muzzleloader

Diagram A
The Fire Storm has A Rear Sight That Looks Like This.



The T/C Fire Storm™ muzzleloader is equipped with a standard rifle rear sight **(Diagram "A" above)** which is adjustable for elevation by moving the elevation "blade" up or down to change the point of impact. To do this, turn the Elevation Adjustment Screw clockwise (as viewed from the breech end) to lower the point of impact, and counter-clockwise, to raise the point of impact.

To adjust the windage it is necessary to move the entire rear sight leaf left or right by using the slotted screw head on the right side of the rear sight (as viewed from the receiver end of the sight). Move the rear sight blade in the direction you want your shots to hit-- (Example; Turn the screw clockwise - thereby moving the sight blade to the right, to move your shots to the right and counter-clockwise to move the shots to the left).

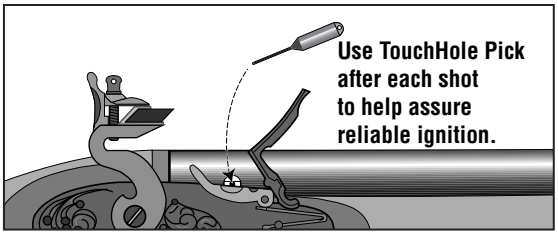
Loading and Practical Tips for the Fire Storm™ Flint Lock Rifle

Complete loading instructions are outlined in the booklet which came with your Fire Storm rifle "Shooting Thompson/Center's Black Powder Muzzleloading Firearms". This booklet must be read and fully understood before using this rifle. In addition to the information contained in the booklet, this supplemental manual contains specific information pertaining to only the Fire Storm. It also must be read and understood fully before attempting to use your rifle.

⚠WARNING

Never prime your Fire Storm until you are ready to fire it. Your Fire Storm should remain unprimed (absent of any priming powder in the pan) until the instant before firing. After you prime the Fire Storm, your full concentration should be on the target and the act of firing. FAILURE TO FOLLOW THIS RULE CAN RESULT IN AN ACCIDENTAL DISCHARGE WHICH MAY CAUSE SERIOUS INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

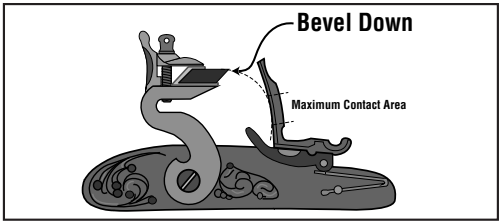
T/C recommends that you carry the Fire Storm with the **touchhole pick inserted into the touchhole**, the pan empty, the frizzen closed, and the hammer at half cock. Tying a thong to the touchhole pick and attaching it to the trigger guard will prevent its loss.

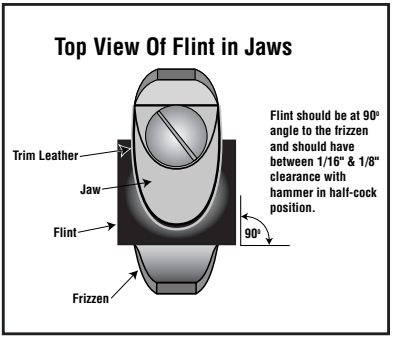


Many pioneers and frontiersmen often used a feather this way; inserting the quill into the touch hole, with the frizzen closed, holding it in place. When it was time to load, they opened the frizzen, pulled the quill and primed the pan. Fill one-half the pan with FFFFG (4F) black powder.

Flint Installation - Reliable ignition of your Fire Storm, like any flint lock, is of utmost importance. Many variables affect a flint lock's ignition and need to be addressed to provide reliable ignition. *But, then again, that's what makes using a flint lock so much fun*. Here are some factors which will affect ignition, and some tips to eliminate as many of the "demons" as possible for positive ignition.

1. Insert your flint into the jaws of the hammer, **BEVEL DOWN**. Make sure that the flint is cushioned by a leather pad, surrounding the end of the flint which goes into the jaws. The flint should be held firmly in the jaws, and, bevel down, it should come to within 1/16" to 1/8" from the face of the frizzen when the frizzen is closed **and the hammer is at half-cock**. If it is inserted all the way into the jaws, and it comes in contact with the face of the frizzen, your flint is too long. Acquire a shorter one. If it does not come to within 1/16" to 1/8" from the frizzen when fully seated, your flint can be moved forward in the jaws and then tightened securely.




Top View Of Flint in Jaws
Trim Leather
Jaw
Flint
Frizzen
Flint should be at 90° angle to the frizzen and should have between 1/16" & 1/8" clearance with hammer in half-cock position.
90°

Make sure the flint is aligned in the jaws perfectly square, so that the edge of the flint is perfectly horizontal across the face of the frizzen. This will ensure maximum contact of the entire flint edge with the face of the frizzen.

When the flint is well secured in the jaws, bevel down (see diagram), you will get maximum surface contact with the frizzen when the flint strikes the face of the frizzen. The higher the initial contact, the more surface area is used to create the sparks. The more sparks there are, the better the ignition potential.

2. After the flint is securely locked in place, trim off the excess leather around both the top and bottom jaws of the lock.

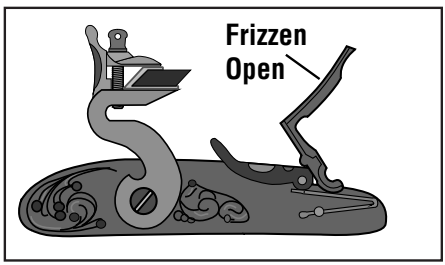
3. Make sure the surface of the frizzen, the pan, flint, and the leather cushion is free of any oil or lubricant, and as dry as possible. Never wipe down these parts with any type of lubricant. If, in the process of cleaning your rifle, a lubricant comes in contact with one or all of these parts, use a good degreaser to remove this oil. Dry is the key to good ignition.

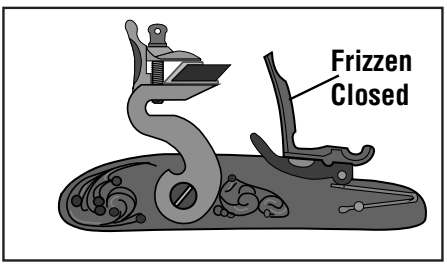
4. Sharp flints are a must.

5. The ignition time of a flint lock is slower than a cap lock. Hold your sight picture steady, despite that "flash" that is going on in the pan. Its a test of true marksmanship to remain on target during the ignition of the priming powder. A flinch at this time will mean you are off target when the main charge goes off.

6. Use your touch hole pick after each shot. When the flint lock discharges, powder and fouling is also blown out the touch hole. This debris must be cleared before loading the next projectile. A partially or totally plugged hole will result in a misfire or "flash in the pan".

7. Always wear eye protection and hearing protection. Protect your arms from flying particles as well as by wearing a shirt with long sleeves. Those wearing long hair or beards should use extra caution when firing a flint lock. A flint lock can torch hair.



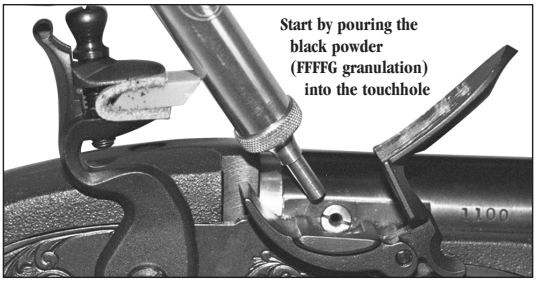


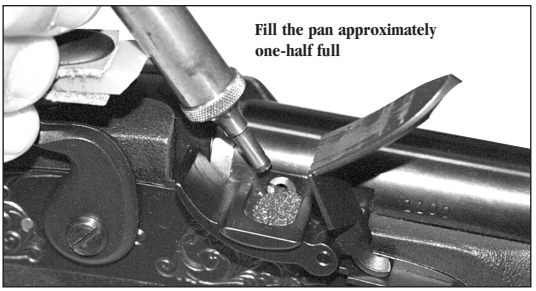
Priming Tips for your Fire Storm™ Flint Lock

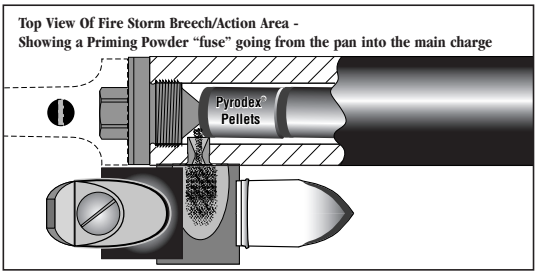
NOTE: Priming the pan of your flint lock correctly is as important as getting good sparks from your flint. The two go hand-in-hand with regards to reliable ignition. The following steps should be taken to ensure reliable ignition.

1. Use your touchhole pick ***before*** loading.
Insert the pick into the touch hole and move it in and out to ensure that the full diameter of the touch hole is clear for the entire length of the ignition channel. You will probably notice after firing your flint lock, that a crust of powder residue builds up in the ignition channel, partially blocking it. This crust must be eliminated, and the channel cleared out to the full diameter, before loading the next projectile, in order to get reliable ignition.

2. When pouring your priming powder, ***start*** by pouring the black powder (FFFFG granulation) into the touchhole, then fill the pan approximately one-half full.
By giving the stock a few light "taps" with the heel of your hand, you help settle some of the priming powder further into the ignition channel. This also helps to improve the reliability of ignition.






Top View Of Fire Storm Breech/Action Area -
Showing a Priming Powder "fuse" going from the pan into the main charge
Pyrodex®
Pellets

Suggested Black Powder & Pyrodex® Pellet Loads For The Fire Storm™ Rifle Only with .490" Diameter Patched Round Balls

For Use With .50 Cal. T/C Fire Storm Only Patches Lubricated with Bore Butter Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using Round Ball Loads	
.490" Diameter Lead Ball Weight (Grains)	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
175 Grain Lead Ball	50 grs. FFG	1357 F.P.S.	716 Ft. Lbs.
	60 grs. FFG	1434 F.P.S.	799 Ft. Lbs.
	70 grs. FFG	1643 F.P.S.	1050 Ft. Lbs.
	80 grs. FFG	1838 F.P.S.	1313 Ft. Lbs.
	90 grs. FFG	1950 F.P.S.	1478 Ft. Lbs.
	100 grs. FFG	2052 F.P.S.	1637 Ft. Lbs.
	110 grs. FFG	2135 F.P.S.	1772 Ft. Lbs.
Load Shown in Red is Maximum			

For Use With .50 Cal. T/C Fire Storm Only Patches Lubricated with Bore Butter Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using Round Ball Loads	
50 Grain Pyrodex® Pellet Loading Data			
.490" Diameter Lead Ball Weight (Grains)	Powder Charge (50 Gr. Pellet)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
175 Grain Lead Ball	1 Pellet	1128 F.P.S.	495 Ft. Lbs.
	2 Pellets	1802 F.P.S.	1262 Ft. Lbs.
	3 Pellets	2230 F.P.S.	1993 Ft. Lbs.
Load Shown in Red is Maximum			

Suggested Black Powder Loads For The Fire Storm™ Rifle Only with .50 Cal. Maxi-Ball® & Maxi-Hunter® Bullets

For Use With .50 Cal. T/C Fire Storm Only Bullets Lubricated with Bore Butter Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads	
For Use With .50 Cal. Lead Bullets	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
275 Grain Maxi Hunter® and 320 Grain Maxi-Ball® Lead Bullet	80 grs. FFG	1395 F.P.S.	1383 Ft. Lbs.
	90 grs. FFG	1455 F.P.S.	1504 Ft. Lbs.
	100 grs. FFG	1509 F.P.S.	1618 Ft. Lbs.
	110 grs. FFG	1570 F.P.S.	1751 Ft. Lbs.
	120 grs. FFG	1618 F.P.S.	1860 Ft. Lbs.
	130 grs. FFG	1663 F.P.S.	1965 Ft. Lbs.
	140 grs. FFG	1686 F.P.S.	2020 Ft. Lbs.
	150 grs. FFG	1723 F.P.S.	2109 Ft. Lbs.
350 Grain Maxi Hunter® and 370 Grain Maxi-Ball® Lead Bullet	80 grs. FFG	1327 F.P.S.	1447 Ft. Lbs.
	90 grs. FFG	1418 F.P.S.	1652 Ft. Lbs.
	100 grs. FFG	1465 F.P.S.	1764 Ft. Lbs.
	110 grs. FFG	1525 F.P.S.	1911 Ft. Lbs.
	120 grs. FFG	1533 F.P.S.	1931 Ft. Lbs.
	130 grs. FFG	1580 F.P.S.	2051 Ft. Lbs.
	140 grs. FFG	1609 F.P.S.	2127 Ft. Lbs.
	150 grs. FFG	1645 F.P.S.	2273 Ft. Lbs.
Load Shown in Red is Maximum			

Suggested Pyrodex® Pellet Loads For The Fire Storm™ Rifle Only with .50 Cal. Maxi-Ball® & Maxi-Hunter® Bullets

For Use With .50 Cal. T/C Fire Storm Only Bullets Lubricated with Bore Butter Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer	**.50 Caliber Rifle** **Using T/C .50 Caliber Maxi-Ball & Maxi-Hunter Loads**		
50 Grain Pyrodex® Pellet Loading Data			
For Use With .50 Cal. Lead Bullets	**Powder Charge (50 Gr. Pellet)**	**Muzzle Velocity (Feet Per Second)**	**Muzzle Energy (Foot Pounds)**
275 Gr. Maxi Hunter® & 320 Gr. Maxi-Ball®	2 Pellets	1694 F.P.S.	2039 Ft. Lbs.
	3 Pellets	1995 F.P.S.	2828 Ft. Lbs.
350 Gr. Maxi Hunter® & 370 Gr. Maxi-Ball®	2 Pellets	1634 F.P.S.	2194 Ft. Lbs.
	3 Pellets	1866 F.P.S.	2861 Ft. Lbs.
Load Shown in Red is Maximum			

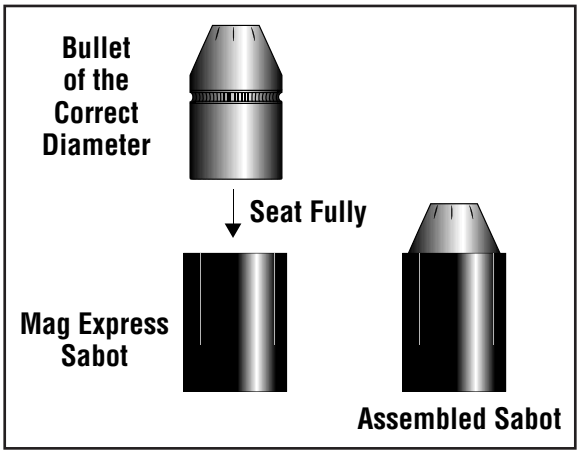
Assembly and Loading of T/C Mag Express™ Sabots

T/C Mag Express Sabots come in several variations for .50 caliber muzzleloading applications; some accept 44 caliber (.429" - .430" diameter) bullets and others accept 45 caliber (.451" - .452" diameter) bullets. In either case, insert the correct diameter projectile into the sabot and press firmly, making sure the bullet is fully seated.

⚠WARNING

When loading T/C's Mag Express Sabots, make sure that your gun is unprimed, and that your Mag Express Sabot has been properly assembled. Failure to assemble and load your sabot correctly could result in the bullet disengaging from the sabot. This could result in an air space between the components. UNDER SUCH A CONDITION, ONE OR MORE OF THE COMPONENTS MAY ACT AS A BARREL OBSTRUCTION AND FIRING COULD RESULT IN INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

To properly assemble your T/C Mag Express Sabot, insert the projectile into the sabot and press firmly, making sure the bullet is fully seated. Use only bullets of the correct diameter.



⚠WARNING

Use only bullets of the correct diameter that were designed for the sabots you are using. Using bullets of lesser diameter may cause the bullet to separate from the sabot resulting in a barrel obstruction. Using bullets of larger diameter could result in difficult loading, or a condition where the sabot is not seated all the way down on the powder charge, resulting in a barrel obstruction. EITHER CASE CAN RESULT IN A DAMAGED FIREARM AND POSSIBLE INJURY AND/OR DEATH TO THE SHOOTER OR BYSTANDERS AND DAMAGE TO PROPERTY.

Suggested Black Powder Loads For the Fire Storm™ .50 Cal. Rifle Only with .44 Caliber Mag Express™ Sabots

For Use With .50 Cal. T/C Fire Storm Only Using Bullets of .429" - .430" Diameter. Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using T/C .44 Caliber Mag Express™ Sabot Loads	
For Use With .429" - .430" Bullets	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
200 Grain Bullet	80 grs. FFG	1634 F.P.S.	1186 Ft. Lbs.
	90 grs. FFG	1673 F.P.S.	1243 Ft. Lbs.
	100 grs. FFG	1730 F.P.S.	1329 Ft. Lbs.
	110 grs. FFG	1759 F.P.S.	1374 Ft. Lbs.
	120 grs. FFG	1809 F.P.S.	1454 Ft. Lbs.
	130 grs. FFG	1835 F.P.S.	1528 Ft. Lbs.
	140 grs. FFG	1911 F.P.S.	1622 Ft. Lbs.
	150 grs. FFG	1924 F.P.S.	1644 Ft. Lbs.
240 Grain Bullet	80 grs. FFG	1466 F.P.S.	1146 Ft. Lbs.
	90 grs. FFG	1606 F.P.S.	1375 Ft. Lbs.
	100 grs. FFG	1640 F.P.S.	1434 Ft. Lbs.
	110 grs. FFG	1686 F.P.S.	1515 Ft. Lbs.
	120 grs. FFG	1729 F.P.S.	1593 Ft. Lbs.
	130 grs. FFG	1770 F.P.S.	1669 Ft. Lbs.
	140 grs. FFG	1821 F.P.S.	1767 Ft. Lbs.
	150 grs. FFG	1846 F.P.S.	1816 Ft. Lbs.
275 Grain Bullet	80 grs. FFG	1445 F.P.S.	1275 Ft. Lbs.
	90 grs. FFG	1533 F.P.S.	1435 Ft. Lbs.
	100 grs. FFG	1590 F.P.S.	1544 Ft. Lbs.
	110 grs. FFG	1640 F.P.S.	1643 Ft. Lbs.
	120 grs. FFG	1687 F.P.S.	1738 Ft. Lbs.
	130 grs. FFG	1726 F.P.S.	1820 Ft. Lbs.
	140 grs. FFG	1762 F.P.S.	1896 Ft. Lbs.
	150 grs. FFG	1794 F.P.S.	1966 Ft. Lbs.
300 Grain Bullet	80 grs. FFG	1434 F.P.S.	1370 Ft. Lbs.
	90 grs. FFG	1512 F.P.S.	1523 Ft. Lbs.
	100 grs. FFG	1582 F.P.S.	1666 Ft. Lbs.
	110 grs. FFG	1619 F.P.S.	1747 Ft. Lbs.
	120 grs. FFG	1637 F.P.S.	1786 Ft. Lbs.
	130 grs. FFG	1661 F.P.S.	1838 Ft. Lbs.
	140 grs. FFG	1685 F.P.S.	1892 Ft. Lbs.
	150 grs. FFG	1726 F.P.S.	1985 Ft. Lbs.

Load Shown in Red is Maximum

Suggested Pyrodex® Pellet Loads For the Fire Storm™ .50 Cal. Rifle Only with .44 Caliber Mag Express™ Sabots

For Use With .50 Cal. T/C Fire Storm Only.
Using Bullets of .429" - .430" Diameter.
Use T/C Flint with FFFFG (4F) Black Powder
(Priming Powder) or 209 Shotshell Primer

.50 Caliber Rifle
Using T/C .44 Caliber Mag Express™ Sabot Loads

50 Grain Pyrodex® Pellet Loading Data

For Use With .429" - .430" Bullets	Powder Charge 50 Grain Pellet(s)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
200 Grain Bullet	2 Pellets	2015 F.P.S.	1804 Ft. Lbs.
	3 Pellets	2258 F.P.S.	2265 Ft. Lbs.
240 Grain Bullet	2 Pellet	1868 F.P.S.	1860 Ft. Lbs.
	3 Pellets	2203 F.P.S.	2587 Ft. Lbs.
250 Grain Bullet	2 Pellet	1849 F.P.S.	1898 Ft. Lbs.
	3 Pellets	2182 F.P.S.	2644 Ft. Lbs.
275 Grain Bullet	2 Pellet	1740 F.P.S.	1849 Ft. Lbs.
	3 Pellets	2079 F.P.S.	2640 Ft. Lbs.
300 Grain Bullet	2 Pellet	1707 F.P.S.	1942 Ft. Lbs.
	3 Pellets	2021 F.P.S.	2721 Ft. Lbs.

Load Shown in Red is Maximum

Suggested Black Powder Loads For the Fire Storm™ .50 Cal. Rifle Only with .45 Caliber Mag Express™ Sabots

For Use With .50 Cal. T/C Fire Storm Only. Using Bullets of .429" - .430" Diameter. Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using T/C .45 Caliber Mag Express™ Sabot Loads	
For Use With .451" - .452" Bullets	Black Powder Charge (Grains)	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
250 Grain Bullet	80 grs. FFG	1448 F.P.S.	1164 Ft. Lbs.
	90 grs. FFG	1592 F.P.S.	1407 Ft. Lbs.
	100 grs. FFG	1626 F.P.S.	1468 Ft. Lbs.
	110 grs. FFG	1671 F.P.S.	1550 Ft. Lbs.
	120 grs. FFG	1707 F.P.S.	1618 Ft. Lbs.
	130 grs. FFG	1758 F.P.S.	1716 Ft. Lbs.
	140 grs. FFG	1804 F.P.S.	1807 Ft. Lbs.
	150 grs. FFG	1835 F.P.S.	1870 Ft. Lbs.
Load Shown in Red is Maximum			

Suggested Pyrodex® Pellet Loads For the Fire Storm™ .50 Cal. Rifle Only with .45 Caliber Mag Express™ Sabots

For Use With .50 Cal. T/C Fire Storm Only. Using Bullets of .429" - .430" Diameter. Use T/C Flint with FFFFG (4F) Black Powder (Priming Powder) or 209 Shotshell Primer		.50 Caliber Rifle Using T/C .45 Caliber Mag Express™ Sabot Loads	
50 Grain Pyrodex® Pellet Loading Data			
For Use With .451" - .452" Bullets	Charge 50 Gr. Pellets	Muzzle Velocity (Feet Per Second)	Muzzle Energy (Foot Pounds)
250 Grain Bullet	2 Pellets	1849 F.P.S.	1898 Ft. Lbs.
	3 Pellets	2148 F.P.S.	2644 Ft. Lbs.
Load Shown in Red is Maximum			

Ballistics Using .50 Caliber Conical Bullets

Bullet	50 Grain Pyrodex® Pellets	Range in Yards	Impact from line of Sight	Velocity f.p.s	Energy ft./lbs.
350 Grain Maxi-Hunter® or 370 Grain Maxi-Ball® Lead Conical	2	0	-.8	1649	2235
	2	50	+1.9	1383	1572
	2	100	0.0	1176	1137
	2	150	-8.1	1041	891
	2	200	-21.8	951	743
350 Grain Maxi-Hunter® or 370 Grain Maxi-Ball® Lead Conical	3	0	-.8	1866	2861
	3	50	+1.5	1574	2036
	3	100	0.0	1326	1445
	3	150	-4.6	1142	1072
	3	200	-15.2	1016	848

Ballistics Using .50 Caliber Mag Express Sabots

240 Grain XTP™	2	0	-.8	1868	1860
	2	50	+1.1	1696	1532
	2	100	0.0	1539	1261
	2	150	-4.8	1399	1043
	2	200	-14.1	1276	867
240 Grain XTP™	3	0	-.8	2203	2587
	3	50	+.7	2006	2143
	3	100	0.0	1830	1783
	3	150	-3.2	1660	1468
	3	200	-9.6	1507	1210
275 Grain XTP™	2	0	-.8	1740	1848
	2	50	+1.4	1571	1506
	2	100	0.0	1420	1232
	2	150	-5.7	1289	1014
	2	200	-16.6	1177	846
275 Grain XTP™	3	0	-.8	2079	2639
	3	50	+.8	1887	2175
	3	100	0.0	1705	1775
	3	150	-3.8	1540	1447
	3	200	-11.4	1393	1185
300 Grain XTP™	2	0	-.8	1707	1942
	2	50	+1.4	1573	1649
	2	100	0.0	1452	1404
	2	150	-5.6	1343	1200
	2	200	-15.9	1244	1030
300 Grain XTP™	3	0	-.8	2010	2692
	3	50	+.8	1862	2310
	3	100	0.0	1718	1965
	3	150	-3.8	1583	1669
	3	200	-11.1	1461	1421

.50 Caliber Ballistics Cont'd…					
Bullet	50 Grain Pyrodex® Pellets	Range in Yards	Impact from line of Sight	Velocity f.p.s	Energy ft./lbs.
250 Grain PTX™	2	0	-.8	1849	1898
	2	50	+1.2	1629	1472
	2	100	0.0	1437	1145
	2	150	-5.5	1273	899
	2	200	-16.4	1144	727
250 Grain PTX™	3	0	-.8	2182	2643
	3	50	+.8	1934	2077
	3	100	0.0	1707	1617
	3	150	-3.7	1504	1255
	3	200	-11.5	1330	982

Your Notes and Loading Records

FIRE STORM™

Your Notes and Loading Records

FIRE STORM™

Suggested Loads, Assembly, Disassembly & Cleaning Instructions For The Thompson/Center Fire Storm Muzzleloader

02/04

Part No.00016881